

# MILITARY QUALITY, REMOVABLE CONTACT, SUBMINIATURE-D CONNECTORS

FOR MILITARY AND SEVERE INDUSTRIAL ENVIRONMENTAL APPLICATIONS

## **CONTACT VARIANTS**

FACE VIEW OF MALE OR REAR VIEW OF FEMALE

00000

EVD9

0000000

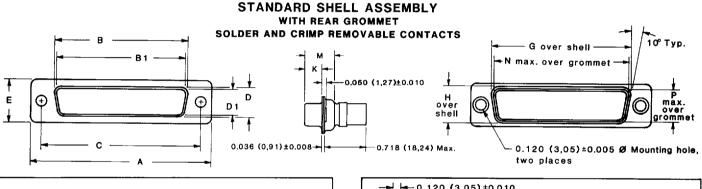
EVD15

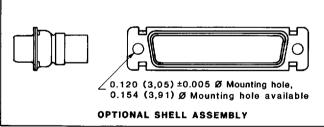
EVD25

ଟେଅଟଟଟଟଟଟଟଟଟଟଟଟି ବର୍ଷ ବେଶର ବ୍ୟବହର୍ଷ ବ୍ୟବହର୍ଷ ବ୍ୟବ୍ୟ ବ୍ୟବ୍ୟ

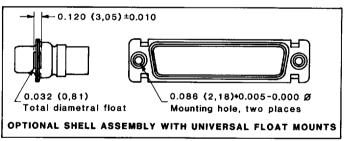
EVD37

EVD50





B BAGITTA SITA



CONNECTOR	A	В	B1	С	D	D1	E	G	н	ļκ	М	N	Р
VARIANT SIZES	±0.015	±0.005	±0.005	±0.005	±0.005	±0.005	±0.015	±0.010	±0.010	±0.005	±0.010	Max.	Max.
EVD 9 M	1.213		0.666	0.984		0.329	0.494	0.759	0.422	0.233	0.422	0.769	0.432
EAD 2 M	(30,81)		(16,92)	(24,99)		(8,36)	(12,55)	(19,28)	(10,72)	(5,92)	(10,72)	(19,53)	(10,97)
EVD 9 F	1.213	0.643		0.984	0.311		0.494	0.759	0.422	0.243	0.429	0.769	0.432
EVU 9 F	(30,81)	(16,33)		(24,99)	(7,90)		(12,55)	(19,28)	(10,72)	(6,17)	(10,90)	(19,53)	(10,97)
EVD 15 M	1.541	i	0.994	1.312		0.329	0.494	1.083	0.422	0.233	0.422	1.093	0.432
EVD 15 M	(39,14)		(25,25)	(33,32)		(8,36)	(12,55)	(27,51)	(10,72)	(5,92)	(10,72)	(27,76)	(10,97)
EVD 15 F	1.541	0.971		1.312	0.311		0.494	1.083	0.422	0.243	0.429	1.093	0.432
E40 10 F	(39,14)	(24,66)		(33,32)	(7,90)		(12,55)	(27,51)	(10,72)	(6, 17)	(10,90)	(27,76)	(10,97)
EVD 25 M	2.088		1.534	1.852		0.329	0.494	1.625	0.422	0.230	0.426	1.635	0.432
EVU 25 M	(53,04)		(38,96)	(47,04)		(8,36)	(12,55)	(41,28)	(10,72)	(5,84)	(10,82)	(41.53)	(10,97)
EVD 25 F	2.088	1.511		1.852	0.311		0.494	1.625	0.422	0.243	0.429	1.635	0.432
EVD 25 F	(53,04)	(38,38)		(47,04)	(7,90)		(12,55)	(41,28)	(10,72)	(6,17)	(10,90)	(41,53)	(10,97)
EVD 37 M	2.729		2.182	2.500		0.329	0.494	2.272	0.422	0.230	0.426	2.282	0.432
EVDS/M	(69,32)		(55,42)	(63,50)		(8,36)	(12,55)	(57,71)	(10,72)	(5,84)	(10,82)	(57,96)	(10,97)
EVD 37 F	2.729	2.159		2.500	0.311		0.494	2.272	0.422	0.243	0.429	2.282	0.432
EVUSIF	(69,32)	(54,84)		(63,50)	(7,90)		(12,55)	(57,71)	(10,72)	(6,17)	(10,90)		(10,97)
EVD 50 M	2.635		2.079	2.406		0.441	0.605	2.178	0.534	0.230	0.426	2.188	0.544
EAD 20 W	(€ <del>6,93</del> )		(52,81)	(61,11)		(11,20)	(15,37)	(55,32)	(13,56)	(5,84)	(10,82)	(55,58)	(13,82)
EVA SA E	2.635	2.064		2.406	0.423		0.605	2.178	0.534	0.243	0.429	2.188	0.544
EVD 50 F	(66,93)	(52,43)			(10,74)		(15,37)		(13,56)		(10,90)	(55,58)	(13,82)

DIMENSIONS ARE IN INCHES (MILLIMETERS) ALL DIMENSIONS SUBJECT TO CHANGE

**Environmental-D** Series

# MILITARY QUALITY, REMOVABLE CONTACT, SUBMINIATURE-D CONNECTORS

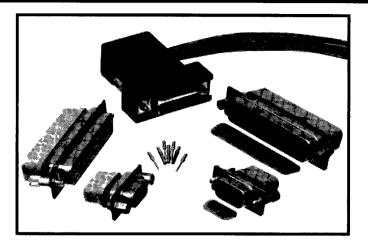
FOR MILITARY AND SEVERE INDUSTRIAL ENVIRONMENTAL APPLICATIONS

**Size 20 Contacts Solder and Crimp** Removable

Military Quality and Severe Industrial **Environmental Applications** 

Environmental-D Series connectors were designed specifically for severe environmental applications where the connector may be subjected to high humidity conditions, rain and/or immersed in water or organic liquids. Environmental protection of the connector is provided by the fluorosilicone grommet, interfacial seal and bonded connector components.

The connectors and contacts are compatible with



MIL-C-24308 and MIL-C-39029.

EVD Series connectors utilize precision machined contacts with closed crimp barrel terminations and solder wire terminations. Female contacts are of closed entry design featuring a stainless steel shroud or an "open entry" Robi-D design. Cable support and locking system accessories are available.

# **ENVIRONMENTAL-D SERIES TECHNICAL CHARACTERISTICS**

#### **MATERIALS AND FINISHES:**

Insulator:

Glass filled DAP per MIL-M-14 type SDG-F,

UL 94V-0, green color.

Contacts:

Male contacts-precision machined brass alloy. Female contacts - precision machined high tensile copper alloy with stainless steel shroud or

Robi-D "open entry" style.

Contact Plating:

Military performance – 0.000050 inch (1,25 microns) gold over copper plate. Industrial performance - 0.000030 inch

(0,75 microns) gold over nickel.

Shells:

Steel or brass with zinc plate with dichromate seal

and stainless steel, passivated.

Mounting Spacers:

Steel or brass, zinc plate with dichromate

Jackscrew Systems:

Steel with zinc plate and dichromate seal and stainless steel, passivated.

Hoods:

Composite.

**Grommet and** 

Fluorosilicone Rubber per MIL-R-25988.

Interfacial Seal: Bonding

Material:

Fluorosilicone based sealant/adhesive.

Sealing Plug:

Teflon.

#### **ELECTRICAL CHARACTERISTICS:**

Dry Conditions, Basic Connector Body:

**Contact Current** Rating:

7.5 amperes, nominal.

**Initial Contact** 

0.005 ohms maximum.

Resistance: **Proof Voltage:** 

1000 V r.m.s.

Insulator

5 G ohms.

Resistance:

Clearance and

0.039 inch (1,0 mm).

**Creepage Distance** (minimum):

Working Voltage:

300 V r.m.s.

#### **MECHANICAL CHARACTERISTICS:**

Removable Contacts:

Insert contact to rear face of insulator and release from rear face of insulator. Size 20 contact, male - 0.040 inch (1,0 mm) diameter; female - closed entry design with stainless steel

shroud or Robi-D "open entry" style.

**Contact Retention** 

in Insulator: Contact Terminations:

Closed barrel crimp, wire sizes 20 AWG (0,5 mm²) through 24 AWG (0,25 mm²); Solder contacts – 0.042 inch (1,06 mm) minimum hole diameter for 20 AWG (0,5 mm²) through 24 AWG (0,25 mm²) wire size.

Polarization:

Trapezoidally shaped shells.

**Locking Systems:** 

Jackscrews.

9 lbs. (40 N).

Mechanical

Operations:

500 operations minimum per IEC 512-5.

#### **ENVIRONMENTAL CHARACTERISTICS:**

EVD Connectors, having crimp contacts, meet all of the applicable requirements of MIL-C-24308 in addition to the requirements shown below:

#### Test

Humidity Per MIL-STD 1344, Method 1002.2.

1344. Method

Immersion,

2 hours at a

depth of 36 inch (914,4 mm) in

mated condition

per MIL-STD 810

. Method 512.3.

Procedure 1.

Type II.

1016.

# Requirements

1) No deterioration of performance. 2) Insulation resistance greater than

100 megaohms.

3) Withstand a potential of 1000 VAC (rms) without evidence of flashover or breakdown.

1) No detrimental damage. Fluid Immersion Per MIL-STD

2) Meet mating and unmating requirements of MIL-C-24308.

While Immersed:

1) Insulation resistance greater than 100

megaohms.
2) Withstand a potential of 1000 VAC (rms) without evidence of flashover or breakdown.

Temperature -55°C to +125°C. Range:

DOSTIDONIC



S5 - Swaged locknut, 4-40 threads

# MILITARY QUALITY, REMOVABLE CONTACT, SUBMINIATURE-D CONNECTORS

## FOR MILITARY AND SEVERE INDUSTRIAL ENVIRONMENTAL APPLICATIONS

### ORDERING INFORMATION - CODE NUMBERING SYSTEM

Specify Complete Connector By Following Steps 1 Through 9 Insert "0" When Step Is Not Used

ST	ΕP	1	2	3	4	5	6	7	8	] [9]
<u></u>		EVD		P	0	0	Z	0	S	
STEP 1 Basic Series		J								STEP 9 Special Options
EVD Series										Consult Sales Department
STEP 2 EVD Connector Variants			•							
9, 15, 25, 37, 50					1				5	STEP 8 Shell Options
			,	J					8	S - Stainless steel, passivated
STEP 3 Connector Gender									0	– Zinc plated with dichromate seal
P - Male contact with interfacial s F - Female contact	eal								STE	P 7 Locking Systems
STEP 4 Type of Contacts					•			0	<b>)</b>	<ul> <li>None, specify only with 'Z' hood option of STEP 6</li> </ul>
0 - Order contacts separately. 1 - Crimp, 20 AWG - 24 AWG (0,	5 mm²	-0.25	mm²)	kitted					Γ2 Ξ	Fixed female jackscrews     Rotating male jackscrews
with connector.							*5	STEP	6 H	oods
2 - Solder, 20 AWG - 24 AWG (0	,5 mm <sup>2</sup>	²-0,25	mm²)						- No	
kitted with connector.							0   Z		-	mposite hood with rotating male jackscrews
*STEP 5 Mounting Style						J	z.			mposite hood with fixed female jackscrews
<ul> <li>0 – Mounting hole, 0.120 (3,05) di</li> <li>F – Float mounts, Universal</li> <li>S2 – Swaged spacer, 4-40 threads,</li> </ul>			i) lend	ıth				Orde	r sea	ling plugs separately, part number 4737-37-0.
		• •		•			1		1.154	Control of the contro

<sup>\*</sup>For additional information on accessories listed on STEP 5, 6 and 7, see Accessories catalog.